

**Risk-Causality Method:  
Deconstruction, Analysis, and  
Reintegration**

Tony Ward, PhD & Roxanne Heffernan, MSc

Association for the Treatment of Sexual Abusers, North American Congress, 18th October 2018  
Symposium: Deepening Our Understanding of Dynamic Risk: Theory and Practice

Capital thinking. Globally minded.



### From Risk Factors to Causes

- Aim: explore the role of dynamic risk factors in explanations of offending – bridging the gap between prediction and explanation
- Develop a *methodological framework* which can facilitate theory development
- Integrated theories can then guide case formulation and treatment

### Scientific Method & Methodological Frameworks

- Targets of explanation – data & phenomena
- Identification of relevant causal mechanisms via abductive inference
- Development of plausible models - compositional and etiological
- Theory evaluation
- Methodological frameworks unify these explanatory tasks

### Dynamic Risk Factors

- Changeable aspects of individuals/contexts which predict a higher likelihood of recidivism
- Also viewed as “criminogenic needs”, targets of treatment aimed at reducing risk
- Seen as plausible/potential causes – used to explain crime and formulate individual cases

### Conceptual Problems

1. *Composite constructs*- lack coherence
2. *Lack specificity* – cannot identify causes
3. *Grain problem* – levels of abstraction
4. *Normative*- mixture of facts and values

### Where to from here?

- Predictive, not explanatory
- Conceptual mess
- But... track causal processes – “red flags”
- How can DRF be useful in explanations of offending?

### Suggestions for progress

1. Ignore the above problems and treat *DRF as causes*
2. Evaluate them against a set of *risk factor causal criteria*
3. Utilize a *risk-matrix* (e.g., DRRF)
4. Reconceptualize DRF as (proxies of) *impairments in agency*
5. Locate DRF within social *exemplars/practices*

### Bradford-Hill’s Criteria

1. Strong *statistical association* with a specific outcome
2. *Consistency* (e.g., place, circumstances, time, and observers)
3. *\*Specificity* (e.g., to particular groups, body systems and sites, and diseases)
4. *Temporality* (a putative cause precedes an outcome)
5. *\*Biological gradient* (e.g., expect a decrease in effect with a decrease in cause)
6. *\*Plausibility* (i.e., is the cause reasonable within the context of current knowledge? Ideally an etiological/causal mechanism should be identified)
7. *\*Coherence* (i.e., does it cohere with knowledge about the domain? Established facts act as epistemic constraints on causal inference)
8. *\*Experimental manipulation* (i.e., evidence from well-designed studies supports a cause and effect relationship)
9. *\*Analogy* (i.e., the existence of other similar causal relationships)

### “Risk Matrix”

Table 1. Dynamic risk research framework.

Dynamic risk factor	Intimacy Deficits (e.g. emotional congruence with children)			
	Levels of analysis			
Causal processes	Biological	Behavioural	Phenomenological	Contextual
Negative affective systems				
Positive affective systems				
Cognitive systems				
Intrapersonal social processes				
Self-regulation				
Interpersonal social systems				

- Provides various types of evidence for causal processes (i.e., adds explanatory depth).
- A virtue of filtering DRF through the DRRF matrix with its core psychological domains and levels of analysis is that their various components and relationships with each other can be more easily discerned.
- This example will be analyzed in greater depth when we incorporate the DRRF into the *Risk-Causality Method*.

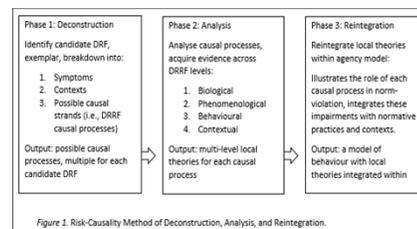
### Agency Impairments

- DRF proxies for impairments in the capacities underlying agency that cause behavior that is harmful and/or illegal in particular contexts.
- First-person intentional level is prioritized, needs to be supplemented with other levels of analysis
- Dual nature, contextually bound
- Begins to address their normativity (i.e., not necessarily dysfunction) and their composite nature (i.e., dispersed across action-sequence)

### Exemplars/Practices

- Embed description of DRF within relevant temporal and social contexts
- Difference re agency models and exemplar/practices approach is that the former is focused on what *persons* do, latter on *problems* and their manifestation
- Exemplar = representation of typical course and symptoms of illness
- Practices are co-ordinated sets of actions based on goals and associated norms – DRF/offending reflect norm violations
- Prototypical characteristics, behavioral patterns, and offence action sequences
- Reflected in DRF categories, sub-types of “child sex offender”

### Risk-Causality Method



### Phase 1: Deconstruction

- *Candidate* (see Mann et al., 2010): e.g., intimacy deficits, emotional congruence with children
- *Exemplar*: e.g., preferential child abuse, sees child as consenting partner, justifies relationship, uses "grooming" techniques
- *Mental state/behavioral variables (i.e., symptoms)*: e.g., feelings of fear, loneliness, desire, safety, excitement, hopefulness, despair, avoids intimacy with adults, makes statements reflecting beliefs about children as capable of consenting to and enjoying sex (i.e., willing participant), reports being in love with victims, uses "grooming" strategies to establish trust
- *Contexts/situations*: e.g., has friendships and intimate contact with children, social isolation, lack of intimacy with adults, regular unsupervised access to children, deviant social networks

### Possible Causal Processes

- *Negative affective systems*: e.g., fear/anxiety (i.e., fearful/avoidant attachment); loneliness; guilt/shame (i.e., post-hoc rationalizations)
- *Positive affective systems*: e.g., views children as sources of reward and more likely to signal opportunities for love, sexual pleasure, and care
- *Cognitive systems*: e.g., attentional bias towards signs of affection/interest or indicators of opportunity (e.g., cues signifying vulnerability, lack of supervision); beliefs/schema support sex with children (i.e., it is not harmful), developmental deficits (i.e., cognitive impairments)

### Possible Causal Processes

- *Intrapersonal social systems*: e.g., tendency to view self as vulnerable/unsafe, dangerous world, lacks understanding of own motives due to expectancy and interpretational biases
- *Self-regulation systems*: e.g., lacks the capacity to soothe himself and control negative physiological arousal; constructs elaborate grooming strategies to accomplish this based on problematic beliefs/goals concerning children
- *Interpersonal social systems*: e.g., theory of mind impairments (i.e., inability to take the perspective of and represent others' mental states), internal working models of affiliation seeking strategies entirely directed towards children

### Phase 2: Analysis

e.g., fear/anxiety response to intimacy with adults

Biological	Phenomenological	Behavioral	Contextual
e.g., amygdala, central nervous system, and associated physical responses to fear and anxiety (e.g., heart racing, dry mouth, and perspiration)	e.g., beliefs about adults (rejecting, dangerous, manipulative), memory and attentional biases towards events that confirm these beliefs, and associated emotions such as fear, anxiety, and loneliness	e.g., fight or flight responses, for example avoidance of interactions with adults or hostility and mistrust towards them	e.g., social events where unknown adults are present, rejection from adults, dating, and situations where norms require social interaction

How should a threat-detection system work?

Develop local models of each possible causal process

### Phase 3: Reintegration

```

    graph TD
      A["First-person Perspective  
Self vulnerable, adults dangerous, children safe  
Sensitive to threat, lonely"] --> B["Current context  
Social gathering +  
Lonely, fear, disengaged"]
      B --> C["Construction of local models  
This is unsafe  
Adults will reject/hurt me, children won't"]
      C --> D["Planning (implicit/explicit)  
Expectations:  
Disapproval from adults  
The child will accept me, it will feel good/better  
I can quickly gain the trust of the child, I know her"]
      D --> E["Action  
Get the child alone, grooming, abuse"]
      E --> F["Feedback and reflection  
Confirmation of expectations, e.g., adults disapprove, child seems happy, I feel good.  
OR  
Error, e.g., grooming/abuse detected, child cries."]
      F --> A
  
```

Reintegrate local models within an agency framework

### Practice & Research Implications

- RCM can structure *clinical inquiry* and, in conjunction with knowledge of etiological theories, can assist practitioners to arrive at a working explanation of an individual's crime related problems
- *Bridge the gap* between risk assessment and intervention, and ensure practitioners consider the explanatory possibilities offered by DRF and avoid the trap of assuming they are causal factors
- *Classification problem*: develop functional classification of offense related phenomena, that provides better explanatory targets (Ward & Carter, 2018)

### Conclusions

- DRF should not be accepted as possible causes of offending because of the problems of incoherence, lack of specificity, grain problem, and their normative status
- RCM can be usefully applied to DRF to “boot strap” theory development and eventually provide a valuable source of information for formulating cases
- RCM can also be utilized with other types of potential causal factors implicated in offending, such as those in etiological theories or implicit within classification systems (i.e., not limited to lists of the strongest correlates)

### References

- Heffernan, R., Ward, T., Vandavelde, S., & Van Damme, L. (under review). Dynamic risk factors and constructing explanations of offending: The risk-causality-method.
- Heffernan, R. & Ward, T. (in press). Dynamic Risk Factors, Protective Factors, and Value-Laden Practices. *Psychiatry, Psychology, & Law*.
- Heffernan, R. & Ward, T. (2017). A comprehensive theory of risk and protective factors. *Aggression and Violent Behavior, 37*, 129-141. doi.org/10.1016/j.avb.2017.10.003
- Ward, T. (2016). Dynamic risk factors: Scientific kinds or predictive constructs. *Psychology, Crime & Law, 22*, 2-16.
- Ward, T. (2017). Prediction and Agency: The Role of Protective factors in Correctional Rehabilitation and Desistance. *Aggression and Violent Behavior, 32*, 19-28.